

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse ALCAM in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human (rh) ALCAM is observed, and less than 10% cross-reactivity with rhBCAM, recombinant mouse (rm) OCAM, and rmMAdCAM-1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse ALCAM/CD166 Trp28-Lys527 Accession # AAC06342
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

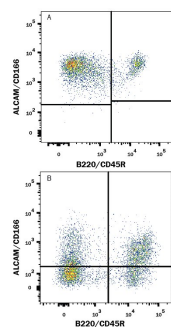
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	10 µL/10 ⁶ cells	See Below

DATA

Flow Cytometry



Detection of ALCAM/CD166 in Mouse Splenocytes by Flow Cytometry. Mouse Splenocytes either (A) activated or (B) resting were stained with Goat Anti-Mouse ALCAM/CD166 Fluorescein-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # FAB1172F) and Rat Anti-Mouse B220/CD45R APC-conjugated Monoclonal Antibody (Catalog # FAB1217A). Quadrant markers were set based on control antibody staining (Catalog # IC108F). View our protocol for [Staining Membrane-associated Proteins](#).

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

ALCAM, activated leukocyte cell adhesion molecule, is a type I membrane glycoprotein and a member of the immunoglobulin supergene family. It is also known as CD166, MEMD, SC-1/DM-GRASP/BEN in the chicken, and KG-CAM in the rat. ALCAM is expressed on thymic epithelial cells, activated B and T cells, and monocytes. ALCAM can bind itself homotypically and is also capable of binding CD6, NgCAM, and other, as of yet, unidentified brain proteins. ALCAM/CD6 interaction may be involved in T cell development and T cell regulation. Additionally, ALCAM/CD6 and ALCAM/NgCAM interactions may play roles in the nervous system. ALCAM has also been observed to be upregulated on highly metastasizing melanoma cell lines and may play a role in tumor migration. ALCAM is a 583 amino acid (aa) protein consisting of a 27 aa signal peptide, a 500 aa extracellular domain, a 24 aa transmembrane domain, and a 32 aa cytoplasmic domain. The extracellular domain of ALCAM contains 5 Ig-like domains of which the amino-terminal V1 domain is essential for ligand binding and ALCAM-mediated cell aggregation (1-4). The ECD of mouse ALCAM shares 97.5% aa sequence identity with rat ALCAM ECD.

References:

1. Bowen, M.A. *et al.* (1995) J. Exp. Med. **181**:2213.
2. Aruffo, A. *et al.* (1997) Immunol. Today **18**:498.
3. Degen, W.G. *et al.* (1998) Am. J. Pathol. **152**:805.
4. Van Kempen, L. *et al.* (2001) J. Biol. Chem. **276**:25783.